

**Patient Exposure to Pregabalin during Pregnancy: Safe or Unsafe?**Araj Naveed Siddiqui<sup>1</sup>, Fakiha Ahmed Shah<sup>2</sup>, Yamna Naveed Siddiqui<sup>3</sup>

*Madam*, pregabalin is an anticonvulsant used mainly for the treatment of epilepsy, neuropathic pain, and anxiety. Recently, a safety advisory by the Drug Regulatory Authority of Pakistan (DRAP) associated the use of pregabalin during pregnancy with a slightly increased risk of major congenital malformations in the inborn child.<sup>1</sup> Given that a considerable portion of pregnant women in Pakistan self-medicate, there is an immediate need to address this issue.<sup>2</sup>

This decision was made in consideration of a drug safety update issued by the Medicines and Healthcare products Regulatory Agency (MHRA) of the United Kingdom, in which findings from a European study and a Nordic observational study were thoroughly analysed before coming to the conclusion.<sup>3</sup> The MHRA-reviewed Nordic study examined the effect of pregabalin exposure on 2,700 pregnant women and observed a higher prevalence of major congenital abnormalities (5.9%) in babies exposed to pregabalin compared to babies not exposed to any anti-epileptic drug (4.1%).<sup>4</sup> Pregabalin-exposed children had a slightly higher risk of developing certain anomalies of the eye, face, the nervous and urological systems.<sup>3</sup> In light of these findings, the MHRA decided that pregabalin product labelling should be updated, and pregnant women should be advised to use effective contraception while taking the medication, or altogether avoid it, unless absolutely essential.<sup>3</sup> However, MHRA also stated, as the Nordic study was observational and based on registry data, the outcomes could have been influenced by various other factors.<sup>3</sup> Furthermore, a few other researchers have expressed differing opinions regarding the MHRA's warning. A critical appraisal by Richardson JL et al. described this update on pregabalin as inadequately supported and leading to confusion and misinformed clinical risk-benefit decision making. This was attributed to certain methodological flaws in the study and low-quality

evidence that suggested the possibility of only a minor, unconfirmed risk that could not be solely associated with foetal exposure to pregabalin.<sup>5</sup>

A multi-centred study should be conducted to develop a better understanding of the role of pregabalin in causing congenital malformations. However, since the MHRA-reviewed Nordic study is the largest population-based study currently available, guidelines given out by the MHRA and DRAP regarding patient exposure to pregabalin during pregnancy cannot be ignored. Public awareness is required to educate pregnant women in Pakistan regarding the risks associated with pregabalin.

**Disclaimer:** None.

**Conflict of interest:** None.

**Funding disclosure:** None.

**DOI:** <https://doi.org/10.47391/JPMA.9683>

**Submission completion date:** 14-04-2023

**Acceptance date:** 22-06-2023

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